

Copy of a printed diagram referenced as "Body centred packing"

Contributors

Fuller, Watson, 1935-

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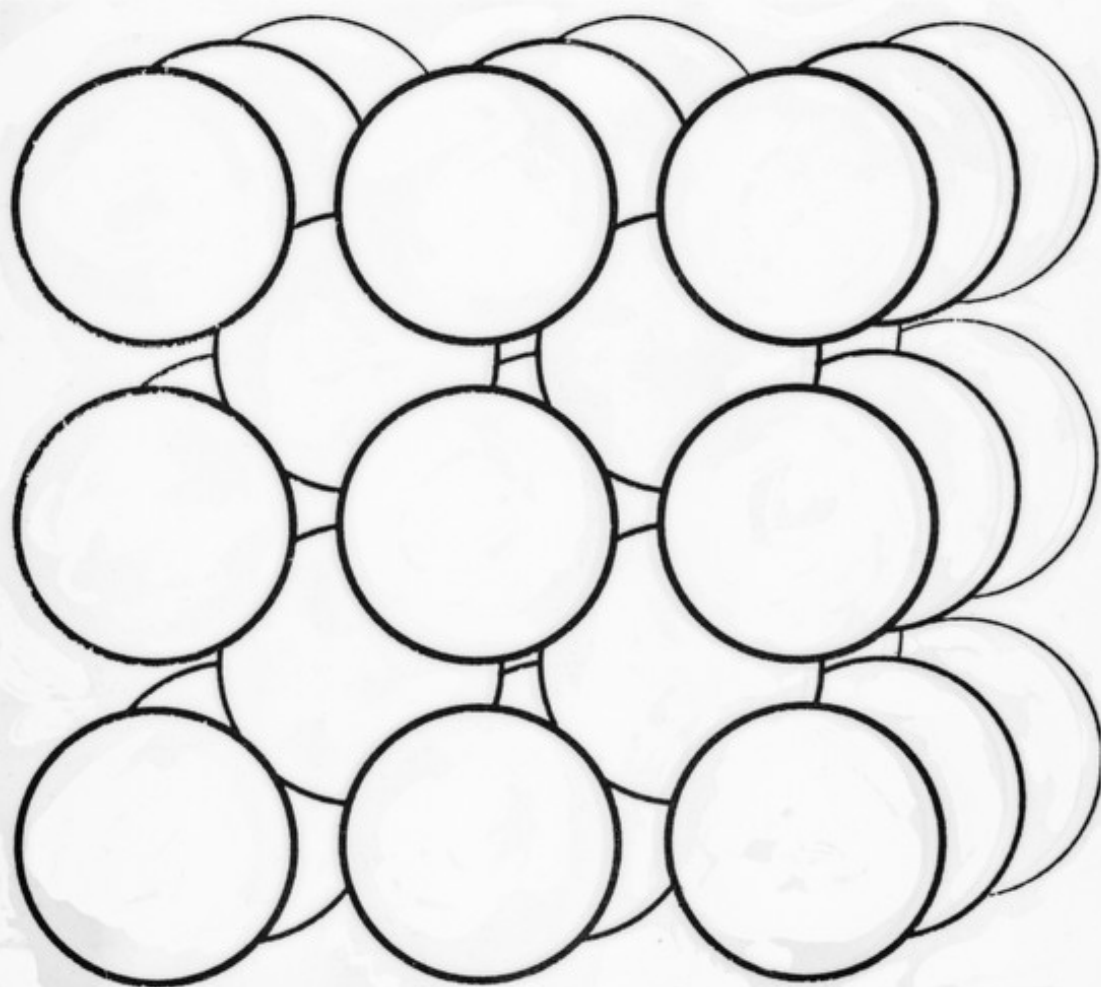
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lattices (1) and (2). It is clear that the two ways are equally efficient in packing the spheres as closely as possible. The hexagonal arrangement of closest packing has an axial ratio $c : a = 1.632 : 1$. The probability that these two methods of closest packing formed the basis of structures of elements was pointed out by Pope and Barlow many years before crystal analysis became possible.



Body-centred cubic packing of equal spheres (A2)

The third simple structure (fig. 89) has atoms at cube corners and centres and is not so closely packed. In packing together incompressible spheres of radius a , each of which has a volume of $\frac{4\pi a^3}{3}$ or $4.18 a^3$, the volume of the structure per sphere